ANNUAL REPORT

OF THE

EASTERN ROCKIES FOREST CONSERVATION BOARD

FOR THE FISCAL YEAR

1967-1968

GARY, ALBERTA MARCH 31, 1968

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CALGARY 3, Alberta

March 31, 1968

EASTERN ROCKIES FOREST CONSERVATION BOARD
514 - 11th Ave. S. W.
Calgary, Alberta

June 15, 1968

The Honourable Maurice Sauve
Minister of Forestry and Rural
Development
Ottawa, Ontario

Sir

I have the honour to submit herewith the Annual Report of the Eastern Rockies Forest Conservation Board for the fiscal period April 1, 1967 to March 31, 1968, pursuant to the provisions of the Eastern Rocky Mountain Forest Conservation Act of 1947. I am

Your obedient servant

J. R. H. Hall
Chairman

EASTERN ROCKIES FOREST CONSERVATION BOARD
514 - 11th Ave. S. W.
Calgary, Alberta

June 15, 1968

The Honourable Henry A. Ruste
Minister of Lands and Forests
Edmonton, Alberta

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EASTERN ROCKIES FOREST CONSERVATION BOARD

BOARD MEMBERS

Chairman and Provincial Member	J. R. H. Hall
Provincial Member	A. T. Baker, B.A.
Federal Member	J. D. B. Harrison, D.C.M., M.Sc.F.,LLD.

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PRINCIPAL OFFICERS

Chief Forester	W. R. Hanson, B.Sc., M.S.
Secretary	J. M. Marshall

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INTRODUCTION

Under the terms of the Eastern Rocky Mountain Forest Conservation Act and the Agreement between the Government of Canada and the Government of the Province of Alberta, the Board's responsibilities and duties as set out in the Act are to set policy, to plan programs for the protection and conservation of the forest resources, supervise the execution of the programs, and arrange for the undertaking of scientific investigations.

The Province of Alberta is authorized to carry out, under the direction of the Board, all administration and execution of the prescribed programs. These responsibilities have been fulfilled by the Alberta Forest Service in a most efficient manner, and the cooperation and assistance extended to the staff of the Board are gratefully acknowledged.

Progress in the cooperative watershed research program is again reported. The organization and scope of the program were changed somewhat during the year to extend the program to all of Alberta, but the investigations on the Conservation Area still retain a place of importance. The Board is grateful to the Steering Committee and the Research Coordinating Committee and to all the Federal and Provincial agencies cooperating in the research program.

Thanks are extended to the Research Council of Alberta, Alberta Forest Service and Wildlife Division, Alberta Water Resources Division, Canada Agriculture Research Branch and P.F.R.A., Canada Wildlife Service, Inland Waters Branch and the Meteorological Branch, for their assistance in the watershed research program; and to the Forestry Branch, Calgary, of the Department of Forestry and Rural Development for the research in both watershed management and other forestry problems.

Again the members of the Board acknowledge with gratitude the efficient and constant service given by the various staff members at all levels.

J. R. H. Hall, Board Chairman
A. T. Baker, Alberta Member
J. D. B. Harrison, Federal Member

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ADMINISTRATION

Five meetings of the Board were held during the fiscal year 1967-68, all in Calgary. A field trip to the Ghost and Red Deer districts of the Bow River Forest was held in conjunction with the August 22 & 23, 1967 meeting. Minutes of all meetings were duly recorded and copies submitted to the Minister of the Federal Department of Forestry and Rural Development and the Minister of the Department of Lands and Forests of the Province of Alberta.

There were no amendments to the existing Agreement between the Government of Canada and the Government of the Province of Alberta during the year under review.

The Board's personnel establishment comprised the following:

Chief Forester
Secretary
Foresters - Grade III (2)
Draftsman - Grade I
Technical Assistant - Grade I
Clerk Stenographer - Grade III
Clerk Typist - Grade II

With the exception of the Chief Forester and Secretary the foregoing incumbents are Provincial Civil Servants on loan to the Board to whom they are responsible for direction.

In addition to the permanent staff three forestry students were engaged during the summer to assist with the field work and studies related to watershed management and research.

The permanent staff of the Alberta Forest Service assigned to the administration and protection of the conservation area numbered 85, together with 32 lookoutmen employed on a seasonal basis. In addition some 177 persons were engaged on a temporary basis on road construction and maintenance, stand-by fire duty, forest management and tree seeding, campground clean-up and construction, weather observing, and other related duties. The foregoing are under the jurisdiction of the Director of Forestry, Alberta Forest Service.

A summary showing the allocation of the Alberta Forest Service staff is appended hereto. (Appendix "A")

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WATERSHED MANAGEMENT PLANNING

CONSERVATION UNIT GUIDES

The preparation of unit guides to assist in land-use planning was intensified during the year while the watershed damage and condition survey was postponed for a year to allow writing of reports to overtake the field survey. Three guides were published; viz., Prairie Creek Conservation Unit Guide - R7; Ram Conservation Unit Guide - R8; and Clearwater Conservation Unit Guide - R9. Each guide contains a watershed analysis, broad land-use classification, a damage survey, a watershed condition and erosion hazard classification, and some management standards.

HYDROLOGY

In a section of the Guides devoted to watershed inventory a hydrological analysis is made. A water budget system is used taking total precipitation as the input and streamflow, evapotranspiration and groundwater recharge as the output. Long-term averages, where available, are used.

The total precipitation for each conservation unit is estimated using available rainfall and snow records as the basis. A system of more than 100 storage precipitation gauges over the Saskatchewan River headwaters, plus some standard attended rain gauges, gives several locality records in each unit. A general positive relationship has been established between precipitation and altitude and this is used to establish an isohyetal map or precipitation zone map. Where enough records are available to establish a different local relationship the precipitation zones are adjusted accordingly. An interesting example of a local variation appears in the Upper North Saskatchewan Unit. Here, 10 years of records show the total annual precipitation on the Kootenay Plains along the river to be 13.1[1] inches, the lowest precipitation recorded in the entire east slope area.

Only 20 miles west and 1,500 feet higher in elevation a gauge indicates total annual precipitation of 23.6 inches. Two intermediate gauges at 4,800 and 5,300 feet elevations indicated annual precipitation of 17.2 and 19.6 inches respectively. The average increase in precipitation for each 1,000 feet elevation is seven inches for this locality which is considerably above the general average.

With the precipitation zone map drawn, the total water input can be calculated.

Stream gauges are installed in most of the major streams leaving the Conservation Area, and therefore runoff records can be had for most drainage basins. It was the aim to install the stream gauge controls so that little or no water by-passed underneath the weir. This has been assumed in our calculations and using the equation P - E = R (P - Precipitation, E - Evapotranspiration, R - Runoff), where precipitation and runoff are known evapotranspiration can be calculated. In cases where there are no stream gauge records, as in the Ram Unit, evapotranspiration is estimated from information from surrounding areas and the streamflow calculated.

By comparing evapotranspiration, as calculated in the above manner, with figures determined experimentally or calculated as potential evapotranspiration, the validity of our assumptions was checked. The following is a partial list of amounts of evapotranspiration as calculated for corresponding conservation units:

(1) All precipitation data adjusted for undercatch and for a 10-year average.

Clearwater Unit	22.3	area inches
Kananaskis-Highwood		
(Highwood River)	14.9	" "
(Kananaskis River)	15.9	" "
South Bow Unit (Elbow-Sheep)	16.6	" "
Castle River	18.0	" "
Oldman River	16.8	" "
Average	17.4	area inches

Some unpublished experimental hydrology in the Marmot experimental basin indicates a figure of approximately 16 inches for evapotranspiration there.

Below is a list of calculated[1] potential evapotranspiration for some selected locations comparable to the above list:

Nordegg	18.4	area inches
Kananaskis	23.6	" "
Banff	19.5	" "

The actual evapotranspiration is often below the potential because there may often be a deficit of moisture in summer which will reduce water transpired

through the plant and evaporated from the soil.

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(1) The figures calculated for the Guides appear to be valid and will add to the much-needed and scanty store of information on water balance on the mountain watersheds of Alberta.

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MANAGEMENT BY THE ALBERTA FOREST SERVICE

A summary of the activities of the Alberta Forest Service in the Conservation Area is outlined hereunder:

FOREST OPERATIONS

Timber Management: In order to facilitate and standardize the accounting and accumulation of wood volume for the wide variety of forest products produced within the Conservation Area, the Forest Service has proceeded with the conversion of timber quotas from lineal to cubic feet. Further progress towards use of cubic foot volume in the Conservation Area was made with the introduction effective May 1, 1967, of a dues schedule (Schedule 'A' of the Forest Management Regulations) which bases dues payments for roundwood products on their content in cubic feet. The regulation rate for roundwood products was established in the Schedule at $2.92 per hundred cubic feet. This rate is revised annually with revised rates effective May 1st of each year.

In the interest of promoting further utilization of small roundwood stands cubic foot quotas have now been sold in two Management Units (B1 and C2). These quotas are outside the existing sawlog quotas and in effect fully commit the total annual allowable cuts for these areas. Operations will be confined to mature stands with the exception of immature stands which are overstocked where stand improvement cutting will take place.

During the past year the following figures illustrate the silvicultural projects carried out in the respective Forests:

	Planting Seedlings	Scarification Acres	Seeding Acres	Thinning Acres	Cone Collection - Bu.
Crowsnest	65,950	1,238	373	113	120
Bow River	77,000	1,264	90	456	400
Clearwater	201,000	1,165	442	87	2,991

A substantial increase in container planting is programmed for 1968-69.

GRAZING

The annual grazing report is a summary compiled from information submitted by the Forest Superintendents of the Crowsnest, Bow River and Clear-

water-Rocky Forests and the Forest Management Branch of the Alberta Forest Service.

The 1967 season was exceptional with respect to weather and precipitation. Spring conditions were cold and growth slow with heavy snowfall totalling 30 inches on the ground on May 1st in the Crowsnest Forest. All grazing in mountain areas was deferred until June 15 with higher elevations even later.

A dry summer followed which caused grasses to cure early with very little second growth. Forage yields for the season were low due to reduced plant vigor.

The total number of livestock grazed under permit in 1967 was 26,191, very close to the same number as the previous years. No sheep were grazed in 1967 but cattle and horse numbers increased. Actual use showed very little change.

A summary of grazing use by domestic animals as compared to 1966 is shown in Appendix "B".

Range condition remained generally good throughout the Forest Reserve even though growth conditions were abnormal. In a number of allotments some degree of over-utilization in limited areas was reported but little actual deterioration in vegetative cover.

Range surveys and reading of permanent transect clusters were continued in 1967 but personnel problems hampered progress somewhat. Starting in 1968 direct supervision of range surveys and preparation of management plans will be delegated to the Forests although Forest Management Branch will retain general supervision and provide professional guidance.

Range improvements conducted during the year included three water development projects, six Texas gates, several miles of fencing, reseeding and weed control.

In the Crowsnest Forest, the West Field distribution unit of Langford-Riley allotment was closed to cattle to protect watershed condition and allow for use by game. Glacier Creek and Sentry-York remain closed. In 1968 a "Cooperative Forage Resources Study" will be conducted, together with the Fish and Wildlife Division, of the Bob's Creek-Spring Creek area where cattle-elk competition appears to be a problem.

No other changes occurred with regard to areas closed to grazing to allow for use by game or to protect recreational value.

Field training of forest officers was continued as the opportunity arose. Liaison and cooperation with users continued to be very good.

RECREATIONAL PLANNING

A program of expanding and improving recreational area sites was initiated in 1965. This redevelopment program is supported financially by funds through the Federal-Provincial ARDA Agreement 1965-1970, in the northern portion of the Bow River Forest and the entire Clearwater-Rocky Forest.

In conjunction with this five-year program of campground expansion throughout the Conservation Area, another ARDA-supported program has been initiated under the Canada Land Inventory and is referred to as the Recreation Capability Sector of the Inventory.

It is a total overall assessment of the physical capability of the lands for recreational use. The lands are identified and classified through photo interpretation and field checking according to a national provincial capability rating system and are mapped on 1/50,000 and 1/250,000 scale maps. This comprehensive inventory will be most valuable and will serve as an aid to guide planning and development in the future. It will be completed for the Forest Reserve at the end of 1968.

The start on a commercial trail ride service facility for the Kananaskis Lakes region in conformity with an approved site plan of operation will be undertaken in 1968 and the advertising for a 40-acre commercial site consisting of a service station, restaurant, motel, campgrounds and trailer park, adjacent to the David Thompson Highway, will be processed in 1968 based on a previously approved site location plan.

In keeping within the Board's policy commercial development is limited and controlled so as to meet conservation and other standards.

Within the scope of planning for intensive use of public recreation areas, water supply and quality has been given top priority. During 1967-68 a total

of 15 producing water wells were contracted out to licensed water-well drillers, making a total of 31 completed to date since the program began. Each well has been pump tested and figures on production capacity have been obtained for future use in facility expansion. In addition, planning is under way to install trailer dumping stations at major recreation site areas to cope with the increasing number of trailer users travelling in the Reserve. This measure is very necessary in order to prevent possible contamination and pollution problems.

In order to collect factual figures on the number of visitors travelling in the Reserve, six traffic counters have been purchased and will be put to use during 1968 at strategic locations.

The objective of this is to relate the number of visitors with the number and capacity of recreation areas as our goal in site planning is to establish capacity ratings for each individual site. This will be based on the number of picnickers, tenters and trailerers that one site could carry at any one time for maximum use without causing deterioration of the site itself.

This will be achieved by segregating each recreational activity at each area and maintaining standards of development that will sustain the natural features. Privacy of individual tenters and trailerers will be promoted as much as possible through design and spacing standards. Vehicular traffic will be controlled at all sites through proper barriers and restricted parking areas. All paths and trails will be gravelled to control foot travel. All facilities shall emphasize a rustic appearance.

The overall number of recreational areas will be decreased; however, the larger expanded developed sites will compensate for the decrease. The fewer larger sites should reflect a saving in total maintenance and operation costs.

When these sites are fully developed a major site layout sign will be placed at each entrance for visitor information to direct users. At all major sites, caretaker services will be employed and at smaller sites clean-up crews will make weekly inspections.

A summary of Board approved Recreation Area Site Plans, Facilities and Services is shown in Appendix "C".

WATERSHED RESTORATION

The Alberta Forest Service program of watershed restoration continued. Corrective action was taken on damaged areas indicated by the Board's watershed inventory and other locations reported by field staff.

During the year approximately 200 miles of seismic exploration lines received treatment by cross-ditching and seeding to grass where necessary. Other damage spots were repaired by various methods.

A trail system was constructed on the Barrier Dam borrow area, in preparation for an erosion control project planned for the summer of 1968. The trails are required to provide access by seeding, fertilizing and mulching equipment.

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FOREST AND WATERSHED RESEARCH

In the Memorandum of Agreement of the Eastern Rocky Mountain Forest Conservation Act the Board is empowered "to make arrangements with other agencies for the undertaking of research and other scientific investigations". In line with this policy the help of several Federal and Provincial agencies has been obtained and research investigations are being carried out in several fields. The work carried out by Board staff and cooperating agencies during the year under review is reported below:

Forest Research

The Board continued to receive generous support and assistance from the Department of Forestry and Rural Development by way of research, which supplies information and guidance. Besides their work in forest hydrology, which is part of the cooperative research program and reported elsewhere under "Watershed Research", a report of the activities of the Department which applies to the Board's program is briefly outlined hereunder:

Silviculture and Ecology: Investigations were continued in the Conservation Area during 1967. Harvest cutting, seedbed treatment and planting trials established between 1961 and 1964 were re-examined. The results of this examination are not yet available.

The establishment of a thinning study in young lodgepole pine, initiated in 1966, was completed in 1967 with base measurements of height, diameter and crown width of all trees. This study is now on a five-year remeasurement basis with the first measurement scheduled for 1972.

Ecological investigations of rates of organic matter accumulation (total tree production) in aspen were initiated in 1967. Study sites are on the Kananaskis Forest Experiment Station and in the Forest Reserve on the north side of Barrier Lake. These studies will provide basic information on stand structure, litter accumulation and breakdown, and stand dynamics in areas dominated by aspen.

Land Classification and Soils: A physiographic land classification was prepared for the Kananaskis Research Forest. Surficial materials were mapped from a preliminary photo interpretation of the landscape and from subsequent field checks at selected sites.

Soil and forest stand data were recorded at 148 sites. Results of the survey are given in a surficial material map at a scale of 1:15,840 (4 inches to the mile). Soil and forest stand conditions are described in tabular form.

A pilot project was established in 1966 in the Kananaskis Research Forest to study soil moisture and temperature regimes in relation to topography and vegetation. Twelve sample plots with 48 observation points were established within two landform types. Soil temperature and moisture content were measured at each observation point in weekly intervals for one year. The observations were terminated in the summer of 1967 and the data are being analysed.

Forest Insect and Disease Conditions: A survey of damage caused by insects and disease within the Conservation Area indicated that the most damaging insects were those defoliating the aspen poplar and the most serious disease condition was on lodgepole pine. Severe defoliation of aspen occurred south of the Crowsnest River for the second year in succession, but the outbreak is expected to subside with much lower population in 1968. Light defoliation by insects, discoloration of foliage and some shoot blight caused by disease, occurred on aspen farther north.

Damage to spruce was insignificant in 1967 with some local observation of damage by the two-year cycle budworm, grasshopper, root collar weevil and needle rust.

Considerable damage to lodgepole pine was caused by needle rust, needle cast and winter drying in several localities in the Conservation Area.

Further information on specific insects and diseases may be obtained from the "Annual Report of the Forest Insect and Disease Survey" and the "Annual District Reports" which are available from the Forestry Branch, Department of Forestry and Rural Development, 132-9th Ave. S. W., Calgary 2, Alberta.

Watershed Management Research

COOPERATIVE RESEARCH PROGRAM

A watershed management research program, organized at the request of the Board, has been under way since 1962 with the work in the field beginning in 1963. It operated under a steering committee based in Ottawa

and a coordinating committee based in Calgary. In March of 1967, on the recommendation of the Technical Coordinating Committee, the program was broadened in scope beyond the boundaries of the Eastern Rockies Forest Conservation Area to include all of Alberta. A new steering committee formed of the Alberta heads of divisions involved in the watershed research program was based in Alberta. A new coordinating committee known as the Research Coordinating Committee, made up of the men in charge of the watershed research, was also formed.

The new program is taking shape and steps are being taken to coordinate all watershed research in Alberta. The "East Slopes" program still forms the major part of the program with some International Hydrologic Decade projects and some others added.

Those projects on the "East Slopes" or in which the Board staff takes part are reported briefly hereunder:

Gauged Basins: The studies in the three gauged basins on the East Slopes (Marmot, Streeter and Deer Creek) continued toward the experimentation stage. Preliminary plans were laid for trials in manipulating the vegetative cover on Marmot Creek and organization has been effected for setting up the actual treatment of two of the three sub-basins, with a target date of 1971.

A review was made of the progress of calibrating Streeter Basin in preparation for treatment. It was decided that considerable work still remained to be done, particularly in groundwater study. A tentative date, 1973, was set for treatment to begin and a Research Group was assigned to prepare preliminary recommendations of treatments for consideration of the Research Coordinating Committee.

The calibration and preliminary investigations of the lodgepole pine type are barely begun in Deer Creek basin. A general plan including the following has been set up: Stream gauging, groundwater instrumentation, meteorological instrumentation, access accommodation, insect and disease survey, geologic mapping, soil survey and mapping, and aerial photography. Several companion studies to yield basic data and principles are planned which include: a hydrologic classification of the soils, consumptive use of soil moisture by the different vegetative types, surface runoff and infiltration and water quality studies.

Forest Hydrology by Department of Forestry and Rural Development: All projects associated with the Alberta Watershed Research Program were continued. Progress has been reported on all projects but none are completed.

Other Studies: Other agencies are also carrying out studies associated with the gauged basins. Among these, the work of the Canadian Wildlife Service was expanded with the appointment of a biologist to spend full time on the watershed research program. To the pocket gopher study under way the following were added: Beaver watershed effect, aspen-willow fauna colonization, aspen management for ungulates and a preliminary mammal census in Marmot and Deer Creek basins.

Applied Watershed Studies by Eastern Rockies Forest Conservation Board: Besides cooperating in the gauged basin studies the Board staff have three studies under way to supply information for better management of watershed lands. The study of snow management in timber cutting was reported last year. The project is completely set up and snow accumulation and melt data are now being taken.

The study of snow accumulation in the alpine zone reported earlier was modified due to the failure of the weir to measure runoff. Most of the runoff underpassed the gauge. The study of methods of accumulating deep drifts is continuing. The cooperation of the University of Guelph has been kindly offered in testing of small models by a water and sand simulation.

A study of damage to watersheds by petroleum exploitation and its restoration is under way in cooperation with the Alberta Forest Service at Swan Hills. This project is outside the Conservation Area but the results may be useful elsewhere.

During early 1967 a short-term management research study was initiated to assess, both qualitatively and quantitatively, the erosion problems of the area and to determine practical restoration methods. An inventory of existing damage was conducted, and restoration trials and plot studies are being evaluated. Basic studies into erosion, precipitation, runoff and soil relationships are being carried out on four small runoff plots. A small climatological network has been established and suspended sediment samples are now being taken from the Swan River.

Forest Management Services

Assessment of Alberta Forest Service container planting, conventional planting and scarification continued in the Clearwater-Rocky Forest by the Forestry Branch of the Department of Forestry and Rural Development. The results of assessment and evaluations have proven extremely useful for forest management purposes as well as the definition of problem areas for research.

Plans were developed for a fertilizer trial in a thinned lodgepole pine stand in the Clearwater-Rocky Forest. This project is a cooperative trial with the Alberta Forest Service and will show the effects of a single fertilizer application ten years before clearcutting.

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FOREST PROTECTION

A total of 51 forest fires were recorded in the Conservation Area during the 1967 calendar year compared with 33 during the preceding year.

Area burned amounted to 1,155 acres compared with 33 acres during 1966.

Fires by Cause

	Total Fires		Per Cent	
	1967	1966	1967	1966
Lightning	27	8	52.9	24.2
Recreation	15	13	29.4	39.4
Industrial	6	4	11.8	12.1
Miscellaneous Causes	3	8	5.9	24.3
	51	33	100%	100%

Fires by Forest	Number	Area Burned
Crowsnest	18	24 acres
Bow River	23	1,049 "
Rocky-Clearwater	10	82 "
	51 fires	1,155 acres

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UTILIZATION OF RESOURCES

FOREST PRODUCTION

Statistics on timber licenses, timber permits and production of lumber and related products in the Rocky Mountains Forest Reserve, as reported by the Alberta Forest Service for the year under review, are noted hereunder:

Number of Timber Licenses offered for sale	none
Number of Timber Licenses granted to Quota Holders	3
Volume of Timber granted:	
Coniferous	29,582,000 f.b.m.
	302,353 cu.ft.
Number of Special Timber Permits issued	1
Number of Miscellaneous Timber Permits issued	213
Number of Active Timber Licenses	62

Production of Lumber and related products:

- Lumber (feet board measure)	41,839,565
- Plywood logs, coniferous (feet board measure)	2,094,837
- Railway Ties (pieces)	37,405
- Round Timber (cubic feet)	213,420
- Lath (pieces)	75,500
- Slabs and Fuelwood (cords)	10
- Christmas Trees (number)	4,348
- Trees for transplanting (number)	387

NATURAL GAS AND OIL DEVELOPMENT

Crowsnest Forest: Twenty-seven operating and five non-operating gas wells.

Bow River Forest: Ten non-operating gas wells. Three wells currently being drilled may be productive.

Clearwater-Rocky Forest: Eight non-operating gas wells; an increase of one from the previous year.

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CONSTRUCTION AND MAINTENANCE

Progress on new construction carried out by the Alberta Forest Service is reported hereunder:

Roads: In the Bow River Forest five miles of the Red Deer Access Road were reconstructed and 42,240 lineal feet of the Harold Creek Road improved. One-half mile of the Oldman River Road in the Crowsnest Forest was improved. Ram River Road, Clearwater Forest, 36,080 lineal feet of third-class grade constructed and gravelled.

Bridges: On the Forestry Trunk Road, six replacement bridges were constructed during the year, namely; South Creek 20' precaste, Indian Creek 28' precaste, Cripple Creek #3, steel girders wooden deck, Cripple Creek #1, 40' precaste, Cripple Creek #2, 28' precaste, Otter Creek, 28' precaste. Multiplate culverts replaced bridges at Lynx Creek #1, Lynx Creek #2 and Side Creek. In the Clearwater Forest the damaged 80' span across the Cardinal River was replaced.

Buildings: Constructed a 30' x 30' office at Nordegg Ranger Station, Blue Hill Tower and buildings replaced, Willow Creek Ranger House enlarged, Calgary Power line installed to the Highwood Ranger Station.

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ACCOUNTING

The statements included in this section of the report reflect the revenue derived by the Alberta Forest Service from surface rights in the Conservation Area and expenditures by the Board and the Province for the maintenance and administration of the Area.

REVENUE

Revenue from surface rights amounted to $337,647.61, an increase of $21,203.72 from the previous year. Details of revenues are summarized hereunder:

	1966-67	1967-68
Grazing Permits, Taxes and Revenue Permits	$ 63,763.98	$ 74,603.96
Grazing - Miscellaneous	-	100.00
Hay Permits, Fees, Dues, Etc.	-	-
Right-of-Entry	1,872.80	1,502.80
Miscellaneous Leases	2,502.29	1,846.18
Sundry Revenue	338.52	2,296.09
Timber Permits	8,905.50	5,614.38
Special Timber Permits	271.36	867.05
Timber Fees, Rentals, Etc.	14,111.07	19,299.54
Timber Dues	224,678.37	231,517.61
	$316,443.89	$337,647.61

EXPENDITURE

Operating expenses of the Board amounted to $80,382.27 provided by the Province of Alberta under Vote 1819 as detailed hereunder:

	General Administrative	Watershed Research	Total Expenditure
Mobile Equipment - Operation	$ 318.10	$ 757.98	$ 1,076.08
Contracts & Agreements	-	533.20	533.20
Fees & Commissions	1,028.00	-	1,028.00
Freight, Express & Cartage	11.00	15.10	26.10
Furnishings, Equipment & Tools	178.81	285.76	464.57
Interest - Bank	2.00	-	2.00
Materials & Supplies - Administrative & Operating	1,010.97	967.03	1,978.00
Construction & Maintenance	6.00	279.13	285.13

	General Administrative	Watershed Research	Total Expenditure
Postage	$ 130.00	$ -	$ 130.00
Rentals of Equipment	-	78.00	78.00
Repairs to Equipment & Furnishings	43.06	122.31	165.37
Repair of Office Machines	15.55	-	15.55
Contributions to Canada Pension Plan	299.01	-	299.01
Telephone & Telegraph	526.95	.80	527.75
Travelling Expenses	1,366.53	3,093.08	4,459.61
Total Administrative & Operating Expense	$ 4,935.98	$ 6,132.39	$ 11,068.37
Salaries - Civil Servants	36,050.75	-	36,050.75
Salaries & Wages - Non-Civil Servants	33,263.15	-	33,263.15
	$ 74,249.88	$ 6,132.39	$ 80,382.27

A current account is maintained with the Royal Bank of Canada, Calgary 2, Alberta, from which the Board disburses its administrative expense. All expenditures by the Board are audited monthly by the Provincial Auditor.

Expenditure for the maintenance and administration of the Conservation Area, including the expense of the Board, provided by the Province of Alberta in accordance with Section 2(a)(11) of the Memorandum of Agreement between the Government of Canada and the Government of the Province of Alberta amounted to $1,293,214.23 for the fiscal year under review.

For financial details see Appendix "D", Statements "A", "B", and "C".

WORKMEN'S COMPENSATION

The Board's deposit of $5,000.00 with the Alberta Workmen's Compensation Board earned interest of $234.31 less administrative expense and reserve for rehabilitation and enhanced disabilities of $84.00, leaving a net credit to Proprietary Equity of $150.31.

ESTIMATES FISCAL YEAR 1968-69

Estimates for the administration of the Board for the fiscal year 1968-69 in the amount of $83,690.00 were approved by the Legislature of the Province of Alberta under Appropriation No. 1819.

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DISTRIBUTION OF ALBERTA FOREST SERVICE PERSONNEL

FISCAL YEAR 1967-68

Permanent Staff	Crowsnest Forest	Bow River Forest	Clearwater-Rocky Forest	TOTALS
Forest Superintendents	1	1	1	3
Fire Control Officers	1	1	1	3
Foresters	1	1	2	4
Assistant Fire Control Officers	1	1	1	3
Forest Management Technicians	-	-	1	1
District Rangers	5	9	8	22
Land Use Officers	1	1	1	3
Assistant Rangers	4	9	6	19
Clerks	1	1	2	4
Stenographers and Typists	1	3	2	6
Radio Operators	1	1	1	3
Carpenters	-	1	1	2
Road Foremen	1	-	1	2
Warehousemen	1	1	1	3
Automotive Equipment Operators	-	1	1	2
Lookoutmen - Permanent	1	2	2	5
	20	33	32	85
Lookoutmen - Seasonal	7	11	14	32
	27	44	46	117

Appendix "B"

GRAZING 1967

The number of domestic animals grazed under permit as compared with the previous year is given below.

	CROWSNEST FOREST		BOW RIVER FOREST		CLEARWATER-ROCKY FOREST		FOREST RESERVE TOTAL	
	1966	1967	1966	1967	1966	1967	1966	1967
Cattle	14,391	14,562	9,509	9,994	960	1,166	24,860	25,722
Sheep	1,000	-	-	-	-	-	1,000	-
Horses	-	-	289	276	147	139	436	415
Total	15,391	14,562	9,798	10,270	1,107	2,305	26,296	26,137
Actual Use in A.U.M.*	46,394	45,607	33,700	33,080	4,372	6,011	84,466	84,698
No. of Permits	187	181	91	94	23	24	301	299
No. of Allotments	47	47	39	39	14	14	100	100
Revenue	$34,314.50	$40,462.42	$24,367.30	$28,887.80	$3,051.64	$3,959.72	$61,889.89	$73,309.94

* A.U.M. - Animal Unit Month; the amount of forage required by one animal unit, which is equivalent to a mature cow and calf at foot, for one month.

*ROCKY MOUNTAINS FOREST RESERVE

RECREATION AREA DEVELOPMENT PROGRAM

Board Approved Recreation Area Site Plans	Unit Capacity			Facilities and Services									
	Picnic Section	Tent Section	Trailer Section	Boat Launching	Developed Water Well	Wood Supply	Caretaker	Weekly Cleanup Inspection	Shelter	Planned Trailer Dumping Disposal Station	ARDA Supported	Parking Areas	
Ram Falls	50	30	20		x	x	x		x	x	x	x	
Fish Lake	20	11	19	x	x	x		x	x	x	x	x	
Upper Shunda Creek	20	15	5		x	x		x			x	x	
Eau Claire	10	10	20		x	x		x	x	x		x	
Cat Creek	10	10	-		x	x		x	x			x	
Cataract Creek	10	10	-		x	x		x	x			x	
Burnt Timber	10	5	-		x	x		x			x	x	
Gooseberry Flat	30	10	10		x	x		x				x	
Kananaskis Lakes	-	22	-	x	x	x		x					
Beaver Flat	10	10	-		x	x		x	x			x	
Spray Lakes	-	21	-	x	x	x		x					
Red Deer River	10	15	-		x	x		x	x				
Livingstone Falls	40	12	4		x	x		x	x			x	
Racehorse	40	10	6		x	x		x	x			x	
Lynx Creek	20	10	6		x	x		x		x		x	
Waiparous Creek	10	20	20		x	x		x	x	x		x	
James Wilson	10	5	10		x	x		x	x		x	x	
	300	226	120										

* Program development during 1965 - 1967 x Facilities provided free

Appendix "D"

GOVERNMENT OF THE PROVINCE OF ALBERTA

OFFICE OF THE PROVINCIAL AUDITOR

EDMONTON, June 14, 1968

Eastern Rockies Forest Conservation Board
CALGARY, Alberta

I have audited the books and records of the Eastern Rockies Forest Conservation Board, maintained by the Department of Lands and Forests, Government of the Province of Alberta, for the year ended March 31, 1968, and submit the following statements herewith:

Statement	Particulars
A.	Balance Sheet
B.	Statement of Maintenance Expenditure
C.	Statement of Government of Canada and Government of the Province of Alberta Equity

Total capital expenditures from inception to March 31, 1955, amounting to $6,278,906.10 were made from funds provided by the Government of Canada (as authorized under Section 8 (a) of the Memorandum of Agreement) for the location and construction of forest improvements, the making of a forest inventory, reforestation, and such other works and services as the Board considered necessary in that area of the East Slope of the Rocky Mountains forming part of the watershed of the Saskatchewan River, as more definitely described in the Appendix to the Act. The total expenditure was not to exceed $6,300,000.00 during the seven years ended March 31, 1955.

I certify that, in my opinion, the attached Balance Sheet is properly drawn up so as to show the true financial position of the Eastern Rockies Forest Conservation Board as at March 31, 1968, according to the information and explanations given to me and as shown by the records of the Board and the accompanying statements correctly set forth the result of transactions for the year ended at that date.

C. X. Kirkland F. C. A.
Provincial Auditor.

Statement A

EASTERN ROCKIES FOREST CONSERVATION BOARD

BALANCE SHEET

AS AT MARCH 31, 1968

ASSETS

Workmen's Compensation Board deposit	$ 5,150.31
Value of loose tools and equipment transferred to the Province of Alberta as at April 1, 1959	173,496.38
Capital improvements and works	5,716,615.20
	$5,895,261.89

LIABILITIES

Government of Canada and Government of the Province of Alberta equity, Statement C	$5,895,261.89

Note: Section 20 of the Memorandum of Agreement set forth in the Schedules to Chapter 59, Statutes of Canada, 1947, and Chapter 20, Statutes of Alberta, 1948, and Amendment Acts, 1957, provides that upon termination of the Agreement:

(a) All improvements or works resulting from the carrying out of the programs of the Board shall belong to the Province.

(b) All other property acquired by the Board shall belong to the Province.

This is the Balance Sheet referred to in my report of June 14, 1968, addressed to the Eastern Rockies Forest Conservation Board.

C. X. [illegible] F. C. A.
Provincial Auditor.

Statement B

EASTERN ROCKIES FOREST CONSERVATION BOARD

STATEMENT OF MAINTENANCE EXPENDITURE

FOR THE YEAR ENDED MARCH 31, 1968

intenance expenses:		
Salaries	$614,008.29	
Wages	184,360.19	
Equipment and motor vehicle expense	136,742.55	
Rentals	127,938.02	
Maintenance, material and operation expense	63,999.60	
Travelling	44,459.04	
Heat, light and power	19,156.35	
Administration and general expense	15,179.62	
Telephone and telegraph	5,718.01	
Freight, express and cartage	2,310.64	
Postage	1,262.70	
Honorarium	1,000.00	
Pensions	333.11	
Advertising	258.13	
		$1,216,726.25
utomobiles, trucks and mobile equipment		74,143.38
urnishings, equipment and tools		2,344.60
		$1,293,214.23
rovided by:		
Appropriations 1815, 1819 and 1821		$1,293,214.23

ote: The total amount expended by the Board was provided by the Government of the Province of Alberta in accordance with Section 2 (a) (ii) of the Memorandum of Agreement, dated June 17, 1953, between the Government of Canada and the Government of the Province of Alberta as set forth in the Schedules to Chapter 41, Statutes of Canada, 1952, and Chapter 36, Statutes of Alberta, 1953.

The remuneration and expenses of members of the Board were paid by the Governments of Canada and the Province of Alberta in accordance with Section 2 (b) (iii) of the Memorandum of Agreement. The amounts paid by the Province of Alberta, including the honorarium of $1,000.00 to A. T. Baker, have been incorporated into the above statement.

Statement C

EASTERN ROCKIES FOREST CONSERVATION BOARD

STATEMENT OF GOVERNMENT OF CANADA AND GOVERNMENT OF THE PROVINCE OF ALBERTA EQUITY

FOR THE YEAR ENDED MARCH 31, 1968

Balance as at April 1, 1967	$ 5,895,250.15
Add:	
Workmen's Compensation Board deposit interest	150.31
	$ 5,895,400.46
Deduct:	
Workmen's Compensation Board interest remitted	138.57
Government of Canada and Government of the Province of Alberta equity as at March 31, 1968	$ 5,895,261.89

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